

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

1. (Currently Amended) A method of diagnosing voices comprising:
processing a test received voice signal associated with a speaker using an auditory model;
~~identifying determining at least one or more voice quality attributes from the test~~
of said processed voice signal;
comparing said identified attributes in said ~~the at least one voice quality attribute~~
~~from the test~~ processed voice signal with at least one or more baseline voice quality
attributes derived from at least one baseline voice signal, said derived attributes
associated with at least one baseline measure of voice quality; and
based upon said comparing step, determining at least one objective measure of
voice quality of said speaker ~~the test voice signal, said at least one objective measure~~
defining a degree of voice quality of said speaker relative to said at least one baseline
measure of voice quality.
2. (Cancelled) The method of claim 1, further comprising determining a degree of
the measure of voice quality.
3. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said at least
one measure of voice quality is at least one of roughness and hoarseness.
4. (Currently Amended) The method of claim 3, wherein the identified ~~voice~~
~~quality~~ attributes of the ~~[[test]]~~ processed voice signal include changes in pitch over time
and changes in loudness over time.

5. (Currently Amended) The method of claim 4, wherein the identified voice quality attributes of the [[test]] processed voice signal include[[s]] a measure of partial loudness.
6. (Currently Amended) The method of claim 1, wherein [[the]] said at least one measure of voice quality is breathiness.
7. (Currently Amended) The method of claim 6, wherein the identified voice quality attributes of the [[test]] processed voice signal include[[s]] a measure of low frequency periodic energy.
8. (Currently Amended) The method of claim 6, wherein the identified voice quality attributes of the [[test]] processed voice signal include[[s]] a measure of high frequency aperiodic energy.
9. (Currently Amended) The method of claim 6, wherein the identified voice quality attributes of the [[test]] processed voice signal include[[s]] a measure of partial loudness of a periodic signal portion of the [[test]] processed voice signal.
10. (Currently Amended) The method of claim 6, wherein the identified voice quality attributes of the [[test]] processed voice signal include a measure of noise in the [[test]] processed voice signal and a measure of partial loudness of the [[test]] processed voice signal.
11. (Currently Amended) A system for diagnosing voices comprising:

means for processing a ~~[[test]]~~ received voice signal associated with a speaker using an auditory model;

means for identifying ~~determining at least one or more voice quality attributes~~ from the test of said processed voice signal;

means for comparing said identified attributes in said ~~the at least one voice quality attribute from the test~~ processed voice signal with at least one or more baseline voice quality attributes in at least one baseline voice signal, said baseline voice quality attributes associated with at least one baseline measure of voice quality; and

means for determining at least one objective measure of voice quality of said speaker ~~the test voice signal~~ based upon said ~~means for comparing~~ comparison, said at least one objective measure defining a degree of voice quality of said speaker relative to said at least one baseline measure of voice quality.

12. (Cancelled) The system of claim 11, further comprising means for determining the degree of the measure of voice quality.

13. (Currently Amended) The system of claim 11, wherein ~~[[the]]~~ said at least one measure of voice quality is at least one of roughness and hoarseness.

14. (Currently Amended) The system of claim 13, wherein the identified ~~voice quality~~ attributes of the ~~[[test]]~~ processed voice signal include changes in pitch over time and changes in loudness over time.

15. (Currently Amended) The system of claim 14, wherein the identified ~~voice quality~~ attributes of the ~~[[test]]~~ processed voice signal include~~[[s]]~~ a measure of partial loudness.

16. (Currently Amended) The system of claim 11, wherein ~~[[the]]~~ said at least one measure of voice quality is breathiness.

17. (Currently Amended) The system of claim 16, wherein the identified ~~voice~~ quality attributes of the ~~[[test]]~~ processed voice signal include~~[[s]]~~ a measure of low frequency periodic energy.

18. (Currently Amended) The system of claim 16, wherein the identified ~~voice~~ quality attributes of the ~~[[test]]~~ processed voice signal include~~[[s]]~~ a measure of high frequency aperiodic energy.

19. (Currently Amended) The system of claim 16, wherein the identified ~~voice~~ quality attributes of the ~~[[test]]~~ processed voice signal include~~[[s]]~~ a measure of partial loudness of a periodic signal portion of the ~~[[test]]~~ processed voice signal.

20. (Currently Amended) The system of claim 16, wherein the identified ~~voice~~ quality attributes of the ~~[[test]]~~ processed voice signal include a measure of noise in the ~~[[test]]~~ processed voice signal and a measure of partial loudness of the ~~[[test]]~~ processed voice signal.

21. (Currently Amended) A machine readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

processing a ~~test~~ received voice signal associated with a speaker using an auditory model;

identifying ~~determining at least one or more~~ voice quality attributes ~~from the test~~ of said processed voice signal;

comparing said identified attributes in said ~~the at least one voice quality attribute~~
~~from the test~~ processed voice signal with at least one or more baseline voice quality
attributes in at least one baseline voice signal, said baseline voice quality attributes
associated with at least one baseline measure of voice quality; and

based upon said comparing step, determining at least one objective measure of
voice quality of said speaker ~~the test voice signal~~, said at least one objective measure
defining a degree of voice quality of said speaker relative to said at least one baseline
measure of voice quality.

22. (Cancelled) The machine readable storage of claim 21, further comprising
determining the degree of the measure of voice quality.

23. (Currently Amended) The machine readable storage of claim 21, wherein
[[the]] said at least one measure of voice quality is at least one of roughness and
hoarseness.

24. (Currently Amended) The machine readable storage of claim 23, wherein the
identified ~~voice quality~~ attributes of the [[test]] processed voice signal include changes in
pitch over time and changes in loudness over time.

25. (Currently Amended) The machine readable storage of claim 24, wherein the
identified ~~voice quality~~ attributes of the [[test]] processed voice signal include[[s]] a
measure of partial loudness.

26. (Currently Amended) The machine readable storage of claim 21, wherein
[[the]] said at least one measure of voice quality is breathiness.

27. (Currently Amended) The machine readable storage of claim 26, wherein the identified ~~voice-quality~~ attributes of the [[test]] processed voice signal include~~[[s]]~~ a measure of low frequency periodic energy.

28. (Currently Amended) The machine readable storage of claim 26, wherein the identified ~~voice-quality~~ attributes of the [[test]] processed voice signal include~~[[s]]~~ a measure of high frequency aperiodic energy.

29. (Currently Amended) The machine readable storage of claim 26, wherein the identified ~~voice-quality~~ attributes of the [[test]] processed voice signal include~~[[s]]~~ a measure of partial loudness of a periodic signal portion of the [[test]] processed voice signal.

30. (Currently Amended) The machine readable storage of claim 26, The method of claim 6, wherein the identified ~~voice-quality~~ attributes of the [[test]] processed voice signal include a measure of noise in the [[test]] processed voice signal and a measure of partial loudness of the [[test]] processed voice signal.